LISTING OF THE CLAIMS

This listing of the claims replaces any and all prior versions and listings of claims in the application:

1. (Currently Amended) A method for preparing a population of water-dispersible ~~semiconductive~~ quantum dot nanoparticles, comprising:

(a) forming a hydrophobic passivating layer on the surface of the plurality of quantum dot nanoparticles to form a plurality of hydrophobic quantum dot nanoparticles;

~~(a)~~ (b) admixing (i) an amphipathic dispersant comprised of a polymer having two or more hydrophobic regions and two or more hydrophilic regions, with (ii) a plurality of hydrophobic quantum dot nanoparticles, in (iii) a nonaqueous solvent, to provide an admixture of dispersant and quantum dot nanoparticles, in the solvent;

~~(b)~~ (c) subjecting the admixture to conditions effective to cause adsorption of the dispersant by the quantum dot nanoparticles; and

~~(c)~~ (d) transferring the dispersant-coated quantum dot nanoparticles prepared in step ~~(b)~~ (c) to an aqueous medium,

wherein each of the two or more hydrophilic regions consists of one or more adjacent hydrophilic monomers and is separated from the other hydrophilic regions by one or more regions which are not hydrophilic, and each of the two or more hydrophobic regions consists of one or more adjacent hydrophobic monomers and is separated from the other hydrophobic regions by one or more regions which are not hydrophobic.

2. (Original) The method of claim 1, wherein the hydrophilic regions contain ionizable groups.

3. (Currently Amended) The method of claim 2, wherein prior to step ~~(b)~~ (c), the admixture is treated with an ionizing agent effective to ionize the ionizable groups.

4. (Original) The method of claim 3, wherein the ionizable groups are acidic groups and the ionizing agent is a base.

5. (Original) The method of claim 4, wherein the base is a nitrogenous base or an inorganic hydroxide.

6. (Currently Amended) The method of claim 1, wherein step ~~(b)~~ (c) comprises removal of the solvent from the admixture.

7. (Currently Amended) The method of claim 1, wherein step ~~(c)~~ (d) comprises adding water to the dried admixture.

8. (Currently Amended) The method of claim 1, wherein the number ratio of the amphipathic dispersant to the plurality of quantum dot nanoparticles in step ~~(a)~~ (b) is in the range of approximately 50:1 to approximately 5000:1.

9. (Currently Amended) The method of claim 1, further including crosslinking the amphipathic dispersant adsorbed to the quantum dot nanoparticles.

10. (Previously Presented) The method of claim 1, wherein the amphipathic dispersant is a polymer.

11. (Previously Presented) The method of claim 10, wherein the amphipathic dispersant polymer is a copolymer of a hydrophilic monomer selected from the group consisting of acrylic acid, methacrylic acid and combinations thereof, with at least one hydrophobic alkyl (C_6 –C_{12}) acrylamide monomer.

12. (Currently Amended) The method of claim 11, wherein the amphipathic dispersant is ~~poly(acrylic acid-co-octylacrylamide)~~ a copolymer of acrylic acid and octylacrylamide.

13. (Currently Amended) The method of claim 12, wherein the ~~poly(acrylic acid-co-octylacrylamide)~~ a copolymer of acrylic acid and octylacrylamide has a molecular weight in the range of approximately 1000 to 5000 g/mol.

14. (Currently Amended) The method of claim 13, wherein the polymer has a molecular weight in the range of approximately 500 to 50,000 g/mol.

15. (Currently Amended) The method of claim 14, wherein the polymer has a molecular weight in the range of approximately 1000 to 10,000 g/mol.

16. (Currently Amended) The method of claim 15, wherein the polymer has a molecular weight in the range of approximately 1000 to 5000 g/mol.